

**REMARKS**

In the Office Action, the Examiner noted that claims 1-16 are pending in the application, claims 1-16 are rejected, and claim 4, 10 and 15 are objected to. By this Amendment, claims 4, 10, and 15 have been amended. The Examiner's rejections and objections are respectfully traversed below.

**Claim Objections**

Claims 4, 10, and 15 were objected to because of a number of informalities. The Applicants would like to thank the Examiner for his thoughtful comments, and submit that the claims as amended satisfy the Examiner's objection. Therefore, the Applicants respectfully request withdrawal of this objection.

**Claim Rejection under 35 USC § 112**

Claims 3, 4, 9, 10, 14 and 15 were rejected under 35 USC § 112, second paragraph. The Examiner claims that the use of the term "about" renders the claims indefinite because no standard is set forth for determining what dimensions would fall within the claimed ranges. The Applicants respectfully submit that the use of term "about" does not render the rejected claims indefinite. Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed in light of the specification. In addition, the Examiner has cited no close prior art. If the Examiner is implying or alleging that a person of ordinary skill in the art would not have understood what was claimed in light of the specification then this must be in the personal knowledge of the Examiner, and the Applicants therefore respectfully request that the Examiner in his next Official Action submit an affidavit detailing as specifically as possible such motivation (see 37 CFR § 1.104(d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

**Claim Rejection under Obviousness Type Double Patenting**

Claims 1, 2, 5, 7, 8, 12 and 13 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,454,839 ("Schmidt") in view of Nutzel. The Applicants respectfully submit that with respect to Claims 1, 2, 5, 7, 8, 12 and 13 the Examiner has not established a prima

facie case of obviousness. Contrary to the Examiner's assertion, Nutzel does not disclose a plurality of microelectromechanical valves, microelectromechanical piezoelectric devices, or microelectromechanical shape memory alloy based devices but rather bore housing cylindrical pins. In addition, Nutzel does not disclose an elastomeric polymer being sealed about each opening representing the Braille dots. With respect to claim 5, neither claim 1 to Schmidt nor Nutzel disclose microelectromechanical valves that are electrostatically actuated. Furthermore, the Applicants submit that the Examiner has not given any reason, suggestion, or motivation in the references, or from the references cited as a whole, for the person of ordinary skill to have combined or modified the references. The Applicants submit that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting such combination. If such suggestion or incentive is in the references, the Applicants respectfully request that the Examiner particularly point out the relevant sections of those references cited which suggest or motivate his combination of the references. If the Examiner is alleging that a person of ordinary skill would have been motivated to combine such references, the Applicants respectfully submit that how a person of ordinary skill in the art would have been motivated must be in the personal knowledge of the Examiner, and therefore respectfully requests that the Examiner in his next Official Action submit an affidavit detailing as specifically as possible such motivation (see 37 CFR § 1.104(d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

Claims 3, 4, 9, 10, 14 and 15 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,454,839 ("Schmidt") in view of Nutzel, and further in view of Wright. The Applicants respectfully submit that with respect to Claims 3, 4, 9, 10, 14 and 15 the Examiner has not established a prima facie case of obviousness. The Applicants submit that in addition to the comments cited above neither Nutzel nor Wright disclose a coating or film having a thickness in the range of from about 0.001 to about 1.25 mm. In addition, the Applicants respectfully submit that these limitations would not be obvious in light of the fact that Wright discusses strength, pliability and elasticity to someone skilled in the art. Furthermore, the Applicants submit that the Examiner has not given

any reason, suggestion, or motivation in the references, or from the references cited as a whole, for the person of ordinary skill to have combined or modified the references. The Applicants submit that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting such combination. If such suggestion or incentive is in the references, the Applicants respectfully request that the Examiner particularly point out the relevant sections of those references cited which suggest or motivate his combination of the references. If the Examiner is alleging that a person of ordinary skill would have been motivated to combine such references or that the limitations cited above would have been obvious in light of Wright, the Applicants respectfully submit that how a person of ordinary skill in the art would have been motivated must be in the personal knowledge of the Examiner, and therefore respectfully requests that the Examiner in his next Official Action submit an affidavit detailing as specifically as possible such motivation (see 37 CFR § 1.104(d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

Claims 6, 11 and 16 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,454,839 ("Schmidt") in view of Nutzel, and further in view of Schmidt as viewed in combination with Crotzer. The Applicants respectfully submit that with respect to Claims 6, 11 and 16 the Examiner has not established a prima facie case of obviousness. The Applicants submit that the comments cited above make it clear that each and every element of these claims have not been disclosed in this combination of references including having a modulus of elasticity of less than about 500,000 psi nor having a thickness from about 0.001 to about 1.25 mm. In addition, the Applicants respectfully submit that these limitations would not be obvious in light of the fact that Wright discusses strength, pliability and elasticity to someone skilled in the art. Furthermore, the Applicants submit that the Examiner has not given any reason, suggestion, or motivation in the references, or from the references cited as a whole, for the person of ordinary skill to have combined or modified the references. The Applicants submit that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting such combination. If

such suggestion or incentive is in the references, the Applicants respectfully request that the Examiner particularly point out the relevant sections of those references cited which suggest or motivate his combination of the references. If the Examiner is alleging that a person of ordinary skill would have been motivated to combine such references or that the limitations cited above would have been obvious in light of Wright, the Applicants respectfully submit that how a person of ordinary skill in the art would have been motivated must be in the personal knowledge of the Examiner, and therefore respectfully requests that the Examiner in his next Official Action submit an affidavit detailing as specifically as possible such motivation (see 37 CFR § 1.104(d) (2)). Given the reasons in this response, the Applicants respectfully request withdrawal of this rejection.

**CONCLUSION**

For all the above reasons the Applicants respectfully submit that the application is in condition for allowance and that action is earnestly solicited.

Respectfully submitted,

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Dated



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